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ABSTRACT

An evaluation was conducted to measure and assess student growth and development in the Second-Shift Program at the Johnstown Area Vocational-Technical School (Pennsylvania). The program was designed to provide educational services to students not generally accepted into the school's regular vocational program (eighteen of the forty participating students were identified as special education students), and was concerned with increasing the students' reading ability, computation skills, and familiarity with occupations. Appropriate evaluation instruments were administered to all subjects in the project, either as pretests and posttests or as posttests only. Evaluation project objectives were developed in the following areas: reading achievement as measured by grade level attainment, mathematics achievement, general educational development and achievement, interest in and attitude toward school, familiarity with occupations, interest in an occupational area, attitude toward relevance of academic subjects, decreases in discipline problems, and increases in school attendance. It was found that student achievement as measured by standardized reading and mathematics tests was significant; some students made dramatic advances with respect to grade level attainment; and student attitudes toward school improved significantly. Knowledge of and interest in occupations as measured by the posttest was at a level where much student development might be attributed to the program. (Appendixes contain the pre- and posttest school attitude assessment scale, the parent attitude assessment scale, and data for the occupational interest and knowledge survey.) (TA)

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EVALUATION OF THE SECOND-SHIFT PROGRAM AT THE JOHNSTOWN AREA VOCATIONAL-TECHNICAL SCHOOL

FINAL REPORT

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Submitted to

Pennsylvania Department of Education

and

Johnstown Area Vocational-Technical School

Submitted by

Dr. John W. Toney

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INTRODUCTION

The Second-Shift Program at the Johnstown Area Vocational-Technical School was an attempt to provide educational services to students not generally accepted into the regular vocational program at the school. The general concern of the Second-Shift Program was threefold: (1) to increase the verbal ability of students by providing a reading development program, (2) to increase the computation skills of students by providing a mathematics development program, and (3) to increase the students familiarity with occupations by providing orientation sessions in many occupational areas.

Students accepted into the Second-Shift Program were generally those students who had not achieved sufficiently to warrant their admission to the regular program at the vocational-technical school. In addition, 18 of the 40 students were identified as special education students.

Purpose

The purpose of this project was to evaluate the Second-Shift Program at the Johnstown Area Vocational-Technical School to determine the success and effects of the Second-Shift Program enlight of the program's objectives. The Second-Shift Program objectives, which are listed below, are concerned with student growth and development.

1. All pre-vocational students will show a 1.0 grade level increase in reading, vocabulary, comprehension and speed as measured by appropriate tests.

2. All pre-vocational students will be familiar with at least 20 occupations. Familiarity will include knowledge of necessary skills, years of training, salary potential, and where to receive more information.

3. After one year, students will express an interest in at least two occupational areas.

4. Attitude toward school will show a significant increase from beginning to the end of the program as indicated on subjective checklists.

5. To demonstrate relationships of academic courses to vocational shop areas, students will rate the courses in this program as compared to previous courses to determine significance to them.

6. All students will show a 15% increase in grade point average.

7. Behavioral discipline problems will be reduced by 30% of pre-program rate.

8. 100% of the students will want to return for the second year of the program.

9. Rate of student attendance will improve by 15%.

Consequently, this evaluation project was concerned with measuring and assessing students' growth and development during the period of enrollment in the Second-Shift Program. The enrollment period for the program was from September, 1973 to June, 1974.

Objectives

The objectives of this evaluation project were an outgrowth of the Second-Shift Program objectives. The objectives of the project were to measure and assess student growth and development with respect to the following.

1. Reading achievement as measured by grade level attainment.

2. Mathematics achievement.

3. General educational development and achievement.

4. Interest in and attitude toward school.

5. Familiarity with occupations.

6. Interest in an occupational area.

7. Attitude toward relevance of academic subjects.

8. Decreases in discipline problems.

9. Increases in school attendance.

Research Questions

The research questions developed in an attempt to measure the attainment of the evaluation project's objectives are:

1. Has there been any increase in reading achievement as measured by grade level attainment?

2. Has there been any increase in mathematics achievement as measured by grade level attainment?

3. Has there been any increase in general educational development as measured by reading and mathematics grade level attainment?

4. Has there been any change in attitude toward school as measured by an attitude assessment scale?

5. Has there been any familiarity with occupations as measured by an instrument developed for this project? This instrument can be viewed in Appendix D.

6. Has there been any development of interest in an occupational area as measured by the instrument in Appendix D?

7. Has there been any change in attitude toward the relevance of academic subjects to vocational shop areas from the 1972-73 school year to the 1973-74 school year?

8. Has there been any change in discipline problems from the 1972-73 school year to the 1973-74 school year?

9. Has there been any change in attendance between the 1972-73 school year and the 1973-74 school year?

Limitations of the Study

Some of the limitations encountered in this evaluation project are:

1. The inability to compare grade-point average prior to entry into the Second-Shift Program with averages at the end of the program. This limitation is due entirely to the grading formula and procedure used in the Second-Shift Program.

2. The inability to evaluate mathematical achievement for many students because the students' records showed no mathematical achievement scores.

PROCEDURES AND METHODS

The research questions were answered by administering appropriate instruments to all subjects in the project. Instruments were either administered as pre-tests and post-tests or administered as post-tests only. Where pre-tests and post-tests were used, analyses were made by comparing pre-tests results with post-tests results. Where post-tests were used exclusively, analyses were made by comparing post-test results with similar data collected and recorded on student records prior to the students' enrollment in the Second-Shift Program.

Subjects

The subjects used in this evaluation project were those students enrolled in the Second-Shift Program at the Johnstown Area Vocational-Technical School. Forty students were admitted to the program in September, 1973. In June, 1974, all 40 of the students were still enrolled. However, because of absenteeism, students did not respond to all the instruments in the study.

Of the 40 students enrolled in the program, most could have been catagorized as underachievers and 18 of the 40 students were identified as special education students.

Instrumentation

The instruments used for this evaluation study included standardized reading and mathematics for assessing general educational development. Instruments used for assessing attitudes and occupational familiarity and interest were specifically developed for this project. Each of these instruments can be viewed in the appendix.

The School Attitude Assessment Scales (Appendix A & B) used for assessing student attitudes was essentially one instrument developed in two parts. The 50-item instrument (Appendix A) was used as a pre-test for assessing attitudes

about school during the school year 1972-73, the school year prior to entry into the Second-Shift Program. The 50 items in this instrument were worded in the past tense and designed to elicit opinions about school during the previous year.

The 55-item School Attitude Assessment Scale (Appendix B) was designed to elicit opinions about school during the year enrolled in the Second-Shift Program. This part of the instrument included the 50 items that appeared in the 50-item part of the instrument. However, the items were stated in the present tense. The five additional items in this part were items concerned with eliciting opinions about the Second-Shift Program specifically.

A 20-item instrument (Appendix C) was used to assess parental attitudes toward the Second-Shift Program. In addition, items in this instrument attempted to assess changes in student attitudes as noted by their parents. Parents were also provided an opportunity to include subjective remarks. Some of these remarks are included later in this report.

Data Collection

Data collection for this evaluation study was varied and dependent on the type of data to be collected. Data were collected, in part, throughout the 1973-74 school year.

Reading achievement tests were administered near the beginning of the school year and again near the end of the school year. Comparisons between these two administrations were calculated and are reported later in this report. Reading achievement tests, both post-tests, and pre-tests, were administered by teachers in the Second-Shift Program.

Mathematics achievement tests were administered near the end of the school year. Pre-tests were not administered; consequently, pre-test data was taken from student records. However, this data was non-existent for 18 of the 40

students. Mathematics achievement tests were administered by teachers in the Second-Shift Program.

The 50-item School Attitude Assessment Scale was administered as a pre-test approximately early in the school year. However, the administration of this instrument could have been earlier to prevent the student from being confused about attitudes of his or her previous school year with his or her attitudes about the Second-Shift Program. This instrument was administered by the evaluation project director and the program teachers. The instrument was administered verbally to those students who might have had difficulty reading the items.

The 55-item School Attitude Assessment Scale was administered as a post-test near the end of the 1973-74 school year. Here, as with the 50-item instrument, the instrument was administered by the evaluation project director and the program teachers. This instrument was also administered verbally to students who might have had difficulty reading the items.

Parental attitude data were collected by administering the 20-item instrument during parent-teacher conferences. Twenty-four parents responded to the instrument and, in a few cases, both parents responded.

Attendance data were collected by reviewing student records for the 1972-73 school year which is the year previous to enrollment in the Second-Shift Program. Attendance was also recorded for the school year 1973-74. Analysis of this data is considered later in this report.

DATA ANALYSIS AND FINDINGS

Each of the nine research questions in this evaluation project report will be discussed independently. At the end of this section of the report, however, a summary of the findings will be discussed.

Research Question One

Has there been any increase in reading achievement as measured by grade level attainment?

Reading achievement tests were administered as pre-test and post-tests to students enrolled in the program. The results of the tests appear in Figure 1.

Of the 40 subjects, 35 completed both the pre-test and the post-test. Two students were not available for the pre-test and three students did not take the post-test.

Difference scores were calculated for the 35 students by subtracting post-test scores from pre-test scores. The resultant was a group mean difference score of 1.13 or a mean group increase of 1.13 grade levels. The range of scores existed from a decrease of 2.8 grade levels to an increase of 5.4 grade levels with a median of 0.9. The group mean score indicated an increase of 1.13 grade levels which was significant at the 0.1 level.

Figure 1. Reading Achievement Pre-Test and Post-Test Scores

Student	Pre-Test	Post-Test	Difference	Student	Pre-Test	Post-Test	Difference
1	5.3	6.0	0.7	21	3.2	2.6	-0.6
2	5.0	9.2	4.2	22	5.1		*
3	4.6	5.2	0.6	23	5.0	4.1	-0.9
4	5.5	6.3	0.8	24	5.5	7.0	1.5
5	4.5	6.6	2.1	25	9.0	9.9	0.9
6	2.7		*	26	9.0	10.5	1.5
7	5.8	9.6	3.8	27	5.5	3.0	-2.5
8	5.8	5.8	0.0	28	4.3	6.5	2.2
9	2.4	2.5	0.1	29		5.4	*
10	3.2	4.8	1.6	30	6.2	11.0	4.8
11	3.0	3.6	0.6	31	7.4	7.7	0.3
12	9.0	11.7	2.7	32	5.5	5.4	-0.1
13	10.6	12.6	2.0	33	2.4	2.1	-0.3
14	2.5	3.3	0.8	34		3.5	*
15	3.0	4.3	1.3	35	5.8	6.8	1.0
16	3.8	4.0	0.2	36	5.3	4.5	-0.8
17	7.8		*	37	7.2	12.6	5.4
18	2.2	5.1	2.9	38	4.8	6.9	2.1
19	4.2	5.8	1.6	39	5.7	6.3	0.6
20	4.1	5.3	1.2	40	6.3	3.5	-2.8
				$\bar{x}$.	5.22	6.35	1.13

$t = 3.805$ $\alpha = .01$ $F_{\alpha} 2.70$

*Pre-test or Post-test score unavailable

Research Question Two

Has there been any increase in mathematics achievement as measured by grade level attainment?

Mathematics pre-test scores were recorded from student records. Post-test scores were recorded from student records. Post-test scores were obtained by administering a standardized mathematics achievement test near the end of the school year to students enrolled in the program. The results of the tests appear in Figure 2.

Of the 40 subjects pre-test and post-test scores were available for only 22 subjects. Mathematics grade level scores were not recorded for 18 of the students and two of these students did not take the post-test.

Difference scores were calculated for the 22 students by subtracting post-test scores from pre-test scores. The range of scores, all of which showed an increase from pre- to post-test, existed from 1.5 to 7.8 grade levels. The group mean score was 4.11 which indicated an increase of 4.1 grade levels. This increase was significant at the .01 level.

Figure 2. Mathematics Achievement Pre-Test and Post-Test Scores

Stu. No.	Pre-Test	Post-Test	Difference	Stu. No.	Pre-Test	Post-Test	Difference
1	5.5	7.7	2.2	21		3.4	*
2	0.6	6.7	6.1	22		7.4	*
3	0.5	6.1	5.6	23	5.0	6.5	1.5
4		3.9	*	24	0.6	6.7	6.1
5	4.6	7.7	3.1	25	0.8	8.5	7.7
6		4.9	*	26		9.5	*
7	5.8	9.5	3.7	27		6.3	*
8	0.7	6.9	6.2	28		5.7	*
9	0.3	3.4	3.1	29	0.5	3.9	3.4
10	0.5	6.1	5.6	30		7.4	*
11	5.7	8.5	2.8	31	5.3	7.4	2.1
12			*	32		6.9	*
13		7.4	*	33		3.4	*
14		2.9	*	34		4.4	*
15	5.3	7.7	2.4	35	0.7	8.5	7.8
16		4.9	*	36		5.7	*
17			*	37		10.1	*
18	3.0	4.9	1.9	38	0.6	6.1	5.5
19	5.2	6.9	1.7	39	0.4	5.7	5.3
20	5.5	7.4	1.9	40	5.3	10.1	4.8
				$\bar{x}$.	2.84	6.50	4.11

$t = 9.61$ $\alpha = .01$ $p > 2.84$

* Pre-test and/or Post-test scores unavailable

Research Question Three

Has there been any increase in general educational development as measured by reading and mathematics grade level attainment?

This research question is essentially a composite of research questions one and two. The results of the analysis directed toward research questions one and two indicated a significant group increase both in reading and mathematics

grade level attainment. Consequently, it can be assumed there is a significant increase in general educational development with respect to research question three -- as measured by reading and mathematics grade level attainment.

It should be noted that the non-existence of some scores, especially mathematics scores may tend to biased the results. Had the missing scores been available, the group mean scores may not have been significant. However, a subjective analysis of mathematics post-test scores did not provide substantial evidence to the noted effect.

Research Question Four

Has there been any change in attitude toward school as measured by an attitude assessment scale?

An attitude assessment scale (Appendix A&B) was administered as a pre-test and post-test. The pre-test form contained 50 items worded in the past tense while the post-test form contained the same 50 items but worded in the present tense. Five additional items were included in the post-test form to assess opinions specifically about the Second-Shift Program. In addition, an attitude assessment scale (Appendix C) was administered to parents of students enrolled in the program

The pre-test and post-test was administered to all students enrolled in the program; however, the results of only 36 of 40 instruments were available for analysis. Twenty-two parents responded to an attitude assessment scale.

Figure 3. Pre-Test and Post-Test Mean Scores for School Attitude Assessment Scale

Item	Pre-Test	Post-Test	Difference	Item	Pre-Test	Post-Test	Difference
1	2.64	2.75	.11	29	3.08	2.94	.14
2	**	2.69		30*	2.44	2.67	.23
3*	2.69	2.92	.23	31	**	1.81	
4	2.39	2.61	.22	32*	2.53	3.00	.47
5	2.28	2.89	.61	33*	3.00	3.36	.36
6*	2.81	2.83	.02	34	3.03	3.11	.08
7*	2.91	2.83	-.08	35*	2.37	2.83	.46
8*	2.19	2.47	.28	36	2.85	2.94	.09
9	2.22	2.14	.28	37	2.38	2.56	.18
10*	2.31	2.80	.49	38	2.63	2.86	.23
11	3.18	3.15	-.03	39*	3.24	3.11	-.13
12*	2.67	2.56	-.11	40	2.55	2.86	.31
13	3.31	3.19	-.12	41*	2.53	2.56	.03
14*	2.28	2.56	.28	42*	3.36	3.22	-.14
15*	3.11	2.94	-.17	43*	2.26	2.39	.13
16	2.87	3.28	.41	44	3.13	3.00	-.13
17	3.14	2.89	-.25	45	2.83	3.19	.36
18*	2.26	2.31	.05	46*	2.76	2.94	.18
19	2.89	2.94	.05	47*	2.36	2.53	.17
20	2.56	2.78	.22	48*	3.11	3.25	.14
21*	2.64	2.86	.22	49	**	2.69	
22	**	3.06		50*	2.68	2.61	-.07
23	1.97	2.64	.67	51*	2.76	3.08	.32
24	2.63	3.03	.40	52*	2.63	3.17	.54
25	2.68	2.86	.18	53*	2.56	2.78	.22
26*	3.13	2.92	-.21	54*	2.47	2.97	.50
27	3.06	3.53	.47	55	**	2.36	
28*	2.75	2.69	-.06				
$\bar{x}$	2.69	2.87	.164				

$t = 4.98$ $\alpha = .01$ $p > 2.65$

* Items requiring reversal of scale direction
** Items included only in the 55-item post-test

Mean difference scores were calculated for the 50 items by subtracting mean post-test scores from mean pre-test scores. Fourteen items showed a negative change in attitude while 36 items indicated positive change in attitude while 36 items indicated positive change in attitude. The mean score across all 50 items was 0.164. The change was in the positive direction and was significant at the .01 level.

Parent attitudes indicated a positive attitude toward school. Also, their attitudes indicated a positive change in their childrens' attitudes toward

school. Figure 4 provides a summary of parent attitudes as assessed by the attitude assessment scale found in Appendix C.

Figure 4. Summary of Parent Attitudes

Item	SA	A	D	SD	Mean
1	22	2	0	0	3.92
2	19	5	0	0	3.79
3	1	1	6	16	1.46
4	3	2	10	9	1.96
5	2	2	8	12	1.75
6	1	0	5	18	1.33
7	0	0	5	19	1.21
8	11	11	2	0	3.38
9	12	9	3	0	3.38
10	0	0	8	16	1.33
11	19	5	0	0	3.79
12	1	1	5	17	1.42
13	1	1	12	10	1.71
14	1	1	9	12	1.61
15	11	12	0	1	3.38
16	16	8	0	0	3.67
17	13	10	1	0	3.50
18	15	7	1	1	3.50
19	10	13	1	0	3.38
20	16	8	0	0	3.67

In addition to their responses to the attitude assessment scale, parents made statements such as the following during the parent-teacher interview; "Susan likes school more this year," "Renita likes school much better this year," . . . dislikes hours, but approves of program . . . likes opportunity for vocational training." One mother stated there was an, "Improvement in attitude towards school -- last year I had to force him to attend." One student had both parents attend the teacher-parent conference. Both of these parents indicated they noticed a great improvement and gain in maturity of their daughter.

Research Question Five

Has there been any familiarity with occupations as measured by an instrument developed for this project?

An instrument (Appendix D) was administered to all students enrolled in the program. With the exception of one, all instruments were acceptable for analysis. Some items were not responded to, however, and in some cases, the responses to particular items were not in accordance with directions.

The reader is directed to Appendix D which contains the instrument. Included here also are the responses to each item by number of responses and percentage of total.

There will not be an attempt to statistically analyze each and all of the items in the instrument. If for only one reason, the instrument has not been thoroughly tested for validity and reliability.

However, it should be noted that a large percentage of students had committed themselves to various kinds of working or occupational conditions. Only a small percentage of students responded to "Maybe" on items 4 through 9. These percentages ranged from four percent to 19 percent.

With respect to knowledge about occupational areas (items 13 through 21), a large percentage of students responded correctly to the items. Although, in the case of knowledge about expected salary (item 19), there seemed to be no distinguishable pattern. Students generally were not able to distinguish between occupations with respect to expected salary.

Research Question Six

Has there been any development of interest in an occupational area as measured by the instrument in Appendix D?

Here again the reader is referred to Appendix D specifically items numbered 11 and 12. Most students were able to clarify there interests. Only six students did not respond to item number 12 or were not able to clarify their interest. It would seem that students generally had developed some interest in an occupational area.

Research Question Seven

Has there been any change in attitude toward the relevance of academic subjects to vocational shop areas from the 1972-73 school year to the 1973-74 school year?

This research question was difficult to completely answer objectively. Most of the students enrolled in the program had not attended vocational shops prior to their enrollment in the program; consequently, assessment of relevance was inappropriate. Additionally, during the 1973-74 school year, the students were not enrolled in academic subjects per se. The strict academic subjects were not a part of the Second-Shift Program and were opposed to the objectives of the program.

However, the students generally indicated that they saw some importance in that part of the Second-Shift Program which was not specifically vocational in nature. Responses to items numbered 25 and 29 on the 50-item School Attitude Assessment Scale indicated some degree of importance the students saw in the non-vocational part of the program. The reader is referred to Figure 3 and Appendix B of this report.

Research Question Eight

Has there been any change in discipline problems from the 1972-73 school year to the 1973-74 school year?

Although there was no attempt to objectively evaluate behavior patterns of students, some subjective evaluation did occur. Interviews with teachers and administrators in the Second-Shift Program indicated that behavior and discipline problems were not as prevalent as was expected and as was indicated in previous years.

Research Question Nine

Has there been any change in attendance between the 1972-73 school year and the 1973-74 school year?

Attendance was recorded from student records during the two years indicated for all 40 students in the program. The number of days absent for the 1972-73 school year ranged from zero days to 90 days. The number of days absent for the 1973-74 school year ranged from zero days to 87 days. Figure 5 contains the days absent for each of the 40 students.

Figure 5. Number of Days Absent for the 1972-73 and 1973-74 School Years

Student	1972-73	1973-74	Difference	Student	1972-73	1973-74	Difference
1	11	14	3	21	10	12	2
2	40	24	-16	22	34	48	14
3	4	14	10	23	38	4	-34
4	19	5	-14	24	3	9	6
5	6	6	0	25	0	14	14
6	22	30	8	26	5	5	0
7	12.5	16	3.5	27	4	3	-1
8	6	12	6	28	1	5	4
9	3	23	20	29	27	37	10
10	90	2	-88	30	18	25	7
11	31	31	0	31	3.5	9	5.5
12	5.5	33	27.5	32	26	14	-12
13	20	16	-4	33	6	6	0
14	3	16	13	34	5	20	15
15	11	32	21	35	13.5	19	5.5
16	3	4	1	36	7	26	19
17	0	87	87	37	5	15	10
18	12	8	-4	38	6.5	23	16.5
19	20	4	-16	39	0	0	0
20	14	16	2	40	4	6	2
				Totals	549.5	693	143.5
				$\bar{x}$	13.74	17.32	3.59
				$t = 0.99$	$\alpha = 0.1$		$p > 2.704$

Difference scores were calculated by subtracting attendance in the 1973-74 school year from attendance in the 1972-73 school year. The difference score indicated whether there was an increase or a decrease in number of days absent during the 1973-74 school year. Nine of the 40 students showed an increase in attendance ranging from a low of one day increase to a high of 88 days increased.

Twenty-six students had a decrease in attendance ranging from one more day absent during the year to 87 more days absent. In addition, five students showed no change in the number of days absent.

The mean attendance for all students showed an increase of days absent from 13.74 to 17.32. The mean difference score was 3.59 but was not significant. Although there was a general increase in absenteeism throughout the sample, this increase, across all students, was not significant.

SUMMARY AND CONCLUSIONS

This section of the evaluation report will attempt to summarize the combined analysis of the nine research questions discussed in the previous section of this report. In addition, an attempt will be made to draw some conclusion from the evaluation and make some recommendations as a result of the evaluation.

Summary

It would appear that as a result of the evaluation the Second-Shift Program at the Johnstown Area Vocational-Technical School has in general attained the objectives outlined in the proposal submitted for projected funding.

Although absenteeism did tend to increase during the activation of the program, this increase was not significant. The absenteeism might be a result of the hours of the day the program was conducted. This appeared to be the only explicit complaint made about the program. Other causes of increased absenteeism might be explained as a result of the transporting of students from home school districts or the increased pressures on students due to achievement. Students might have elected to be absent at times because of the inconvenience, unpleasantness, etc. of being transported many miles. Students might also have elected to be absent because of pressures resultant from achievement attained that has been discussed in the previous section.

Student achievement, a primary objective of the program, as measured by standardized reading and mathematics tests was significant. Some students made rather dramatic advances with respect to grade level attainment. Significant increases in grade level attainment, which, of course, might have resulted regardless of the program, was certainly one of the highlights, achievements, and important purposes of the Second-Shift Program.

Student attitudes toward school changed significantly in the direction of an improved attitude toward school. This change might be explained by increased

achievement or the achievement might be explained by the change in attitude. Attitudes might have changed as a result of concern by the educators involved in the program. Whatever the reason, the Second-Shift Program in some way contributed evidently to students' change in attitudes toward school.

Although no pre-test was available for comparison, knowledge of and interest in occupations as measured by the post-test appeared to be at a level where much of the knowledge and interest might be attributed to the program. Students were generally committal with respect to types and conditions of work they would prefer. They also generally appeared to have sufficient knowledge of various occupations with the exception of knowledge of expected salary.

Conclusion

It appears that the Second-Shift Program at the Johnstown Area Vocational-Technical School was successful with respect to attainment of objectives. There were some significant changes that occurred. It is apparent that in general some growth and development occurred with students enrolled in the program.

Recommendations

The following recommendations are made by the writer as a result of the evaluation project.

1. The Second-Shift Program should be continued or, at least, the program emphasis should be continued.
2. More emphasis might be placed on knowledge of occupational areas within the vocational part of the program.
3. An attempt might be made to schedule the program during regular school hours.
4. An attempt might be made to provide for improved relationships between Second-Shift students and regular vocational students.

The above recommendations are made by the writer exclusively. The writer realized that many, if not all, of the recommendations might be impracticable in lieu of scheduling, organization, personalities, etc.

The following recommendations are made with respect to this evaluation and future evaluations of the program.

1. The instruments developed for use with this evaluation should be further refined and tested.

2. Instruments should be administered and data should be collected on students prior to or immediately after enrollment in the program. This pre-test data should include all areas of concern with respect to program objectives -- attitudes, achievement, occupational knowledge and interest, attendance, and behavior and discipline.

Postscript

The writer wishes to command specifically the faculty and administration of the Second-Shift Program and the Johnstown Area Vocational-Technical staff in general for their concern for the growth and development of students. Had not this concern been evident, the program and specifically the results of the program would not have been nurished and fulfilled.

APPENDIX A

SCHOOL ATTITUDE ASSESSMENT SCALE

This instrument contains 55 statements concerning an individual's feelings or attitudes toward school. Please answer them as if you were describing your feelings to yourself. Your answers should reflect your feelings about school this year. How you felt toward school prior to this year should not affect your answers. Do not omit any items! Read each statement carefully; then select one of the following responses that most represents your feelings toward the statement by making an X in the appropriate blank.

Answer every item!

Responses:

SA = Strongly agree with the statement
A = Agree with the statement
D = Disagree with the statement
SD = Strongly disagree with the statement

Example

		SA	A	D	SD
1.	I usually look forward to going to class.	(X)	( )	( )	( )

The person answering strongly agrees with the statement.

		SA	A	D	SD
2.	I don't care about school work.	( )	( )	(X)	( )

The person answering disagrees with this statement but not strongly.

		SA	A	D	SD
1.	I like the work I am doing in school.	( )	( )	( )	( )
2.	I miss my friends from my home school.	( )	( )	( )	( )
3.	I have difficulty following directions.	( )	( )	( )	( )
4	I usually look forward to going to class.	( )	( )	( )	( )
5.	I am satisfied with my school work.	( )	( )	( )	( )
6.	My teachers don't care about me.	( )	( )	( )	( )
7.	I have difficulty obeying school rules.	( )	( )	( )	( )
8.	Most of the time I am in school, I would rather be doing something else than doing school work.	( )	( )	( )	( )
9.	I often do school work outside of school.	( )	( )	( )	( )
10.	I am bored with school.	( )	( )	( )	( )
11.	I would rather do well than poorly in school.	( )	( )	( )	( )
12.	My classmates are not interested in what I do.	( )	( )	( )	( )
13.	I expect to stay in school.	( )	( )	( )	( )
14.	I have difficulty explaining problems to teachers.	( )	( )	( )	( )
15.	I generally find it hard to talk with my classmates.	( )	( )	( )	( )
16.	I like the work I am doing in the school shop.	( )	( )	( )	( )
17.	I like to be given responsibility in school.	( )	( )	( )	( )
18.	Most of the time I am in school, I would rather be some place else than in school.	( )	( )	( )	( )
19.	I generally behave well in school.	( )	( )	( )	( )
20.	I feel good about my school work.	( )	( )	( )	( )
21.	I am not interested in what my classmates do.	( )	( )	( )	( )
22.	The second-shift program is good.	( )	( )	( )	( )
23.	I am usually eager to go to school.	( )	( )	( )	( )

		SA	A	D	SD
24.	My teachers understand me.	( )	( )	( )	( )
25.	I see the need for the reading class I attend.	( )	( )	( )	( )
26.	I have difficulty keeping interested in shop classes.	( )	( )	( )	( )
27.	I expect to return to school next year.	( )	( )	( )	( )
28.	The school administrators (Principal, directors, etc.) don't care about me as a person.	( )	( )	( )	( )
29.	I see the importance of school.	( )	( )	( )	( )
30.	I have difficulty keeping interested in school.	( )	( )	( )	( )
31.	I wish I were back in my home school.	( )	( )	( )	( )
32.	I have difficulty with my classroom teachers.	( )	( )	( )	( )
33.	I will quit school as soon as I find a job.	( )	( )	( )	( )
34.	I generally "get along" with most of my teachers.	( )	( )	( )	( )
35.	I have difficulty with my school work.	( )	( )	( )	( )
36.	I get along with my parents better if I stay in school.	( )	( )	( )	( )
37.	I would like school much more without the rules.	( )	( )	( )	( )
38.	I generally "get along" with all of my teachers.	( )	( )	( )	( )
39.	I see no importance in the shop work.	( )	( )	( )	( )
40.	I like school.	( )	( )	( )	( )
41.	I generally find it hard to "get along" with the school administrators (principals, directors, counselors, etc.)	( )	( )	( )	( )
42.	My parents could "care less" about my school work.	( )	( )	( )	( )
43.	I become discouraged easily in school.	( )	( )	( )	( )

		SA	A	D	SD
44.	I usually look forward to going to shop classes.	( )	( )	( )	( )
45.	I try to be careful about my school work.	( )	( )	( )	( )
46.	I never ask teachers to explain something.	( )	( )	( )	( )
47.	I am not satisfied to be what I am.	( )	( )	( )	( )
48.	I will quit school as soon as I am old enough.	( )	( )	( )	( )
49.	I feel I am different from day school students.	( )	( )	( )	( )
50.	I have difficulty following school rules.	( )	( )	( )	( )
51.	I don't care about school work.	( )	( )	( )	( )
52.	I don't care about my teachers.	( )	( )	( )	( )
53.	I would rather have a full-time job than be in school.	( )	( )	( )	( )
54.	I give up easily in school work.	( )	( )	( )	( )
55.	I have difficulty with the day school teachers.	( )	( )	( )	( )

APPENDIX B

SCHOOL ATTITUDE ASSESSMENT SCALE

This instrument contains 50 statements concerning an individual's feelings or attitudes toward school. Please answer them as if you were describing your feelings to yourself. Try to remember last year's school situation and how you felt; then answer each statement according to that feeling. Your answers should reflect your feelings about school last year. How you feel toward school this year should not affect your answers. Omit only those that do not apply! i.e. If you were not in a vocational shop class, then omit or skip those items referring to shop classes. Read each statement carefully; then select one of the following responses that most represents your feelings toward the statement by making an X in the appropriate blank.

Responses:

SA = Strongly agree with the statement
A = Agree with the statement
D = Disagree with the statement
SD = Strongly disagree with the statement

Example

		SA	A	D	SD
1.	I usually looked forward to going to class.	(X)	( )	( )	( )

The person answering strongly agrees with the statement.

		SA	A	D	SD
2.	I didn't care about school work.	( )	( )	(X)	( )

The person answering disagrees with this statement but not strongly.

		SA	A	D	SD
1.	I liked the work I was doing in school.	( )	( )	( )	( )
2.	I had difficulty following directions.	( )	( )	( )	( )
3.	I usually looked forward to going to class.	( )	( )	( )	( )
4.	I was satisfied with my school work.	( )	( )	( )	( )
5.	My teachers didn't care about me.	( )	( )	( )	( )
6.	I had difficulty obeying school rules.	( )	( )	( )	( )
7.	Most of the time I was in school, I would have rather been doing something else than doing school work.	( )	( )	( )	( )
8.	I often did school work outside of school.	( )	( )	( )	( )
9.	I was bored with school.	( )	( )	( )	( )
10.	I would have rather done well than poorly in school.	( )	( )	( )	( )
11.	My classmates were not interested in what I did.	( )	( )	( )	( )
12.	I expected to stay in school.	( )	( )	( )	( )
13.	I had difficulty explaining problems to teachers.	( )	( )	( )	( )
14.	I generally found it hard to talk with my classmates.	( )	( )	( )	( )
15.	I liked the work I was doing in the school shop.	( )	( )	( )	( )
16.	I liked to be given responsibility.	( )	( )	( )	( )
17.	Most of the time I was in school, I would rather have been someplace else than in school.	( )	( )	( )	( )
18.	I generally behav ed well in school.	( )	( )	( )	( )
19.	I felt good about my school work	( )	( )	( )	( )
20.	I was not interested in what my classmates did.	( )	( )	( )	( )
21.	I was usually eager to go to school.	( )	( )	( )	( )
22.	My teachers understood me.	( )	( )	( )	( )

		SA	A	D	SD
23.	I saw the need for the reading class I attended.	( )	( )	( )	( )
24.	I had difficulty keeping interested in shop classes.	( )	( )	( )	( )
25.	I expected to return to school the next year.	( )	( )	( )	( )
26.	The school administrators (principal, directors, etc.) didn't care about me as a person.	( )	( )	( )	( )
27.	I saw the importance of school.	( )	( )	( )	( )
28.	I had difficulty keeping interested in school.	( )	( )	( )	( )
29.	I had difficulty with my classroom teachers.	( )	( )	( )	( )
30.	I would have quit school as soon as I found a job.	( )	( )	( )	( )
31.	I generally "got along" with most of my teachers.	( )	( )	( )	( )
32.	I had difficulty with my school work.	( )	( )	( )	( )
33.	I got along with my parents better if I stayed in school.	( )	( )	( )	( )
34.	I would have liked school much more without the rules.	( )	( )	( )	( )
35.	I generally "got along" with all of my teachers.	( )	( )	( )	( )
36.	I saw no importance in the shop work.	( )	( )	( )	( )
37.	I liked school.	( )	( )	( )	( )
38.	I generally found it hard to "get along" with the school administrators (principals, directors, counselors, etc.).	( )	( )	( )	( )
39.	My parents could have "cared less" about my school work.	( )	( )	( )	( )
40.	I became discouraged easily in school.	( )	( )	( )	( )
41.	I usually looked forward to going to shop classes.	( )	( )	( )	( )

		SA	A	D	SD
42.	I tried to be careful about my school work.	( )	( )	( )	( )
43.	I never asked teachers to explain something.	( )	( )	( )	( )
44.	I was not satisfied to be what I was.	( )	( )	( )	( )
45.	I would have quit school as soon as I was old enough.	( )	( )	( )	( )
46.	I had difficulty following school rules.	( )	( )	( )	( )
47.	I didn't care about school work.	( )	( )	( )	( )
48.	I didn't care about my teachers.	( )	( )	( )	( )
49.	I would have rather had a full-time job than have been in school.	( )	( )	( )	( )
50.	I gave up easily in school work.	( )	( )	( )	( )

APPENDIX C

PARENT ATTITUDE ASSESSMENT SCALE

		SA	A	D	SD
1.	I am interested in my son's/daughter's school work.	( )	( )	( )	( )
2.	I think the school is attempting to provide my son/daughter with an education.	( )	( )	( )	( )
3.	I am not concerned about the school.	( )	( )	( )	( )
4.	The teachers do not understand my son/daughter.	( )	( )	( )	( )
5.	I would rather my son/daughter get a job.	( )	( )	( )	( )
6.	The program my son/daughter is in is a waste of time.	( )	( )	( )	( )
7.	The school is wasting money.	( )	( )	( )	( )
8.	My son/daughter is interested in school.	( )	( )	( )	( )
9.	I feel good about my son's/daughter's school work.	( )	( )	( )	( )
10.	I think the school is unfair with my son/daughter.	( )	( )	( )	( )
11.	I am eager to see my son/daughter go to school.	( )	( )	( )	( )
12.	I see no importance in shop work in school.	( )	( )	( )	( )
13.	I have no idea what my son/daughter does in school.	( )	( )	( )	( )
14.	My son/daughter is not in the classes he/she should be.	( )	( )	( )	( )
15.	The school seems to be interested in my son/daughter.	( )	( )	( )	( )
16.	Most of the time I feel school is important.	( )	( )	( )	( )
17.	My son's/daughter's attitude has changed since his/her enrollment at this school.	( )	( )	( )	( )
18.	My son/daughter seems more interested in school this year.	( )	( )	( )	( )

19.	I am more aware of my son's/daughter's school program this year.	( )	( )	( )	( )
20.	The teachers seem to be interested in my son/daughter.	( )	( )	( )	( )

APPENDIX D

OCCUPATIONAL INTEREST AND KNOWLEDGE SURVEY

		No.	%
1.	How much thought have you given to a future job?		
	A. Much	29	74
	B. Some	10	26
	C. Little	0	0
	D. None	0	0
2.	When it concerns occupations do you consider yourself:		
	A. Well-informed	3	8
	B. Somewhat informed	25	64
	C. Little informed	9	23
	D. Uninformed (Not informed)	2	05
3.	Has the information about occupations you received this year been:		
	A. Greatly useful	11	28
	B. Useful	22	56
	C. Somewhat useful	6	15
	D. Not useful	0	0
4.	Has the information about occupations you received this year increased your knowledge of occupations and jobs?		
	A. Yes	33	85
	B. No	2	05
	C. Maybe	4	10
5.	Would you like to work in an office?		
	A. Yes	5	13
	B. No	20	51
	C. Maybe	14	36
6.	Would you like to work in a factory?		
	A. Yes	12	31
	B. No	8	20
	C. Maybe	19	49
7.	Would you like to work in a retail store (clothing store, department sotre, supermarket)?		
	A. Yes	17	44
	B. No	9	23
	C. Maybe	13	33
8.	Would you like to work in a shop (automotive shop, machine shop, welding shop)?		
	A. Yes	20	51
	B. No	13	33
	C. Maybe	6	15

		No.	%
9.	Would you like to work in the foods industry (cook waiter/waitress, chef)?		
	A. Yes	11	28
	B. No	16	41
	C. Maybe	12	31
10.	Would you like to work:		
	A. Alone	8	21
	B. With others	30	79
11.	What area of occupational programming was of most interest to you?		
	A. Textiles - clothing	0	0
	B. Foods - cook, waiter, waitress	9	24
	C. Service station attendant	4	11
	D. Electrical	4	11
	E. Building maintenance	5	13
	F. Distributive - Sales, etc.	6	16
	G. Automotive	8	21
	H. Business - typing, etc.	0	0
	I. Welding and metals	1	2
	J. Bricklaying	0	0
	K. Printing	1	2

			1st	2nd*
12.	Rate the occupational areas according to your interest using a one (1) for the area of most interest, a two (2) for the area of next most interest, etc.			
	A. Textiles - clothing	A.	1	5
	B. Foods - cook, waiter, waitress	B.	9	2
	C. Service station attendant	C.	4	4
	D. Electrical	D.	1	1
	E. Building maintenance	E.	3	4
	F. Distributive - Sales, etc.	F.	6	0
	G. Automotive	G.	4	6
	H. Business - typing, etc.	H.	1	3
	I. Welding and metals	I.	1	2
	J. Bricklaying	J.	0	1
	K. Printing	K.	4	6

			No.	%
13.	Which of the following occupational areas would generally require you to work in clean and neat conditions? (Check all that apply)			
	A. Textiles - clothing	A.	32	82
	B. Bricklaying	B.	7	18
	C. Foods	C.	38	97
	D. Distributive - Sales, etc.	D.	27	69
	E. Service station attendant	E.	9	23
		All	7	18

		No.	%
14.	Which of the following occupational areas would require you to work with people rather than tools and equipment? (Check all that apply)		
	A. Distributive - Sales, etc.	A. 35	90
	B. Welding	B. 6	15
	C. Service station attendant	C. 24	62
	D. Electrical	D. 8	21
	E. Printing	E. 12	31
		All 4	10
15.	Which of the following occupational areas would require you to work in a shop where conditions would not be neat and clean? (Check all that apply)		
	A. Building maintenance	A. 29	88
	B. Automotive	B. 28	85
	C. Business - typing, etc.	C. 6	18
	D. Printing	D. 24	73
	E. Foods - cook, waiter, waitress	E. 6	18
		All 2	6
16.	Which of the following occupational areas would generally require you to work with tools and equipment rather than people? (Check all that apply)		
	A. Automotive	A. 37	95
	B. Business - typing, etc.	B. 11	28
	C. Welding	C. 34	87
	D. Printing	D. 32	82
	E. Foods - cook, waiter, waitress	E. 16	41
		All 4	10
17.	Which of the following jobs and duties would you be most likely to do if you worked in the welding and metals occupational area? (Check all that apply)		
	A. Scrape metal	A. 29	74
	B. Sell something to a customer	B. 7	18
	C. Solder wires together	C. 24	62
	D. Bend sheet metal	D. 32	82
	E. Use a typewriter	E. 5	13
		All 3	8
18.	Which of the following jobs and duties would you be most likely to do if you worked in the automotive occupational area? (Check all that apply)		
	A. Paint	A. 27	69
	B. Use mortar and bricks	B. 0	0
	C. Work with lumber	C. 1	3
	D. Work with many small hand tools	D. 36	92
	E. Work with large machines	E. 29	74
		All 1	3

19. Rate the occupational areas according to the salary you could expect using a one (1) for the area with the highest expected salary, a two (2) for the area with the next highest expected salary, etc.

		1st	2nd*
A.	Automotive mechanic	A. 3	3
B.	Cook	B. 3	2
C.	Bricklayer	C. 8	3
D.	Sales person	D. 0	4
E.	Printing - printer	E. 2	2
F.	Business - typist	F. 3	0
G.	Welder	G. 8	8
H.	Automotive body painter	H. 1	0
I.	Waiter/waitress	I. 1	0
J.	Textiles - seamtress	J. 0	2

20. Where would you go to receive more information about a job - the salary, working conditions, etc. - that you were interested in? (Check each in the order that you would go, one (1) by the person you would go to first, two (2) by the person you would go to second, etc.).

A.	Parents	A. 5	2
B.	High school counselor	B. 1	7
C.	High school principal	C. 0	1
D.	Director of vocational school	D. 1	4
E.	Vocational school counselor	E. 2	12
F.	Vocational school teacher of the job for which you are interested	F. 20	2

21. Which of the occupational areas would require you to give information or sell something to someone? (Check all that apply)

		No.	%
A.	Building maintenance	A. 17	44
B.	Foods - cook	B. 32	82
C.	Welding and metals	C. 11	28
D.	Service station attendant	D. 31	79
E.	Bricklaying	E. 14	36
		All 5	15

* Number responding to most interest and next most interest only